

Testimony of
ROBERT STIBOLT
SENIOR VICE PRESIDENT
STRATEGY, PORTFOLIO AND RISK MANAGEMENT
SUEZ ENERGY

Before the
Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
United States House of Representatives

November 2, 2005

Testimony of
Robert Stibolt
Senior Vice President
Strategy, Portfolio and Risk Management
Suez Energy

Before the

Subcommittee on Energy and Air Quality
Committee on Energy and Commerce
United States House of Representatives

November 2, 2005

Thank you, Mr. Chairman and members of the Committee for inviting me to present testimony regarding natural gas prices and, more specifically, the role of liquefied natural gas (LNG) in the larger marketplace.

My testimony today will concentrate on five important points related to LNG.

Regional Energy Supply

First, I think it is important to recognize that LNG can contribute substantially to a region's energy supply. For instance our terminal in Everett, Massachusetts meets 15-20% of New England's natural gas demand, and we are capable of meeting 35-40% of the region's demand on peak days. In addition we are supplying the fuel for a new 1,550 megawatt powerplant, which can generate enough electricity for approximately 1.5 million homes each year. If LNG resources were not available in New England, supplies would be far tighter and consumers would suffer.

In short, wherever there is a facility LNG keeps downward pressure on prices by helping to diversify and increase a region's energy supply. By competing openly and fairly with gas delivered via pipeline, LNG helps ensure that consumers get the best deal possible.

There are two other important advantages of LNG. First, LNG helps us access the ample supplies of natural gas around the world. Estimates of the total world supply of natural gas hover around 6 quadrillion cubic feet, and more reserves of natural gas continue to be discovered. Much of this natural gas is stranded a long way from market, in countries that do not need large quantities of additional energy. For purposes of perspective, U.S. natural gas reserves were estimated by the Energy Information Administration (EIA) at 193 trillion cubic feet as of the end of 2004. This represents only about 3% of the world total. Second, liquefying natural gas and shipping it is more economical than transporting it in pipelines for distances of more than about 700 miles offshore or more than 2200 miles onshore.

Consequently, there are 113 active LNG facilities in the U.S., including marine terminals, storage facilities, and operations involved in niche markets. Worldwide there are 17 LNG export terminals, 40 LNG import terminals and 136 specially-designed LNG ships.

Natural Gas Supply

Second, even with our obvious enthusiasm for LNG, it is wrong and probably irresponsible to claim that LNG alone can meet all of our growing needs for natural gas. We view LNG as an important energy source in addition to other North American natural gas supplies, not as a substitute for them.

In short, LNG needs to be thought of as complementary to our current resource base. This is a very important point. Policymakers cannot and should not allow our very sensible and successful approach to LNG to obscure the fundamental reality that we need to better access and develop our Nation's natural resource base.

We believe that the U.S. must increase its domestic production of natural gas. Recent legislative, regulatory and market trends have placed greater demands on our gas supply without taking commensurate steps to increase production. Congress needs to take steps to create a climate in which we can develop adequate supplies, produced in an environmentally protective manner. Access to new reserves is necessary not only to meet new demands, but simply to sustain current production levels.

Currently, in the natural gas industry generally, many fields in the United States are getting more difficult to develop since most of the easy-to-access, highly productive reserves already seem to be accounted for. In Canada, key fields are also maturing while the country is experiencing its own increase in natural gas demand.

At the same time, natural gas demand is growing both overall in the U.S. and in our terminal's home base in New England. There is a significant increase in new natural gas-fired electric power plants, which, although they use less fuel than older, less efficient gas and oil powerplants, still place demands on the resource base. In addition, there is steady growth in demand for natural gas from residential and commercial customers.

More specifically, according to the Energy Information Administration (EIA), natural gas production in the U.S. is predicted to grow from 19.5 Tcf in 2001 to about 26.4 Tcf in 2025. At the same time, total natural gas consumption is expected to increase to about 35 Tcf in 2025. It is not complicated math to see that demand is outstripping supply.

We can talk for a long time about the reasons for higher prices, but when demand is increasing and supply is steady or dropping, it makes no difference whether you are buying and selling toast or helicopters or natural gas – prices are going to increase.

As a result of these factors, many are concluding that LNG represents an important part of the long-term natural gas supply solution.

We believe that because it provides unique flexibility, LNG will continue to grow as a resource for the United States. In our ongoing effort to diversify our supply of energy, LNG's exceptional and exclusive ability to transport what was once stranded natural gas from various sources can only help.

Additionally, as response to demand becomes more important, our ability to move natural gas to where it is needed, freed in part from the constraints of pipelines, will ensure that LNG is an increasingly important element in our Nation's energy supply portfolio. Simply put, LNG offers greater trade flexibility than pipeline transport, allowing cargoes of natural gas to be delivered where the need is greatest and the commercial terms are most competitive.

This trend can already be seen. As the Energy Information Administration has noted, LNG imports have increased by more than 30 times -- from 18 Bcf in 1995 to 540 Bcf in 2003. Factors ranging from additional sources of supply to lowered costs for liquefaction and shipping have contributed to the increase. Currently, anticipated expansions on LNG facilities are expected to raise the United States' import volumes from 2 Bcf per day in 2005 to about 6 Bcf per day in 2010.

Projects

Let me move onto my third topic and address questions about the development of LNG as an important source of energy for the United States. As you know, the Energy Information Administration has indicated that LNG might supply as much as 20% of the natural gas consumed in the United States in the future. Additionally, there are dozens of proposed LNG terminals on the drawing board right now. While I think we can all agree that not all of those facilities will be built, and it is unlikely that LNG will supply 20% of this Nation's natural gas anytime in the near future, it is safe to say that LNG can provide a growing fraction of the energy needed to power the world's largest economy.

We at Suez are confident in the future of LNG in this country. We are investing in two major projects to bring LNG into the U.S. We own and operate the terminal at Everett, and have some capability to deliver additional LNG supplies through both Cove Point and Lake Charles. A Suez subsidiary with direct access to LNG at the point of liquefaction is an important source of supplies delivered into Cove Point and Lake Charles. We are leaders in the worldwide LNG industry and are involved in the process from liquefaction through transportation right up to the point at which the gas is delivered into the pipeline.

Our two major projects are designed to bring more LNG into the markets in New England and Florida. These markets have constrained access to natural gas, in part because pipeline capacity is not robust in those areas. These projects make sense for us as a business and for the consumers of New England and Florida, who continue to demand the benefits brought about by a plentiful, affordable supply of natural gas.

The project in New England is an off-shore facility located about 12 miles off the coast of Massachusetts near Gloucester. This facility, which will consist essentially of a hookup to a nearby underwater pipeline, will require a special set of tankers that can regasify the LNG right on the ship and feed directly into the region's pipeline system. When complete, this \$1 billion project will give us the ability to supplement our cargoes into Everett, increase the supply of natural gas being delivered into New England, and provide our customers with the most affordable natural gas in the region.

The project in Florida will bring LNG from the Bahamas via pipeline. Right now, we are working with the regulatory agencies to determine our best options. Unfortunately, sometimes the regulatory agencies are not as interested in moving energy projects along as we are.

Let me offer our experience in Florida as an example. There, we have been working diligently to gain the appropriate regulatory authority to construct a pipeline between the Bahamas and Florida. Last April, FERC approved our EIS, the State gave its determination of consistency with respect to the coastal zone, and the local governments all approved the project. Unfortunately, the Corps of Engineers decided after all that to raise questions. The Corps representatives had participated in all the interagency meetings and discussions, but they waited until FERC had acted to raise their concerns, some of which included very fundamental elements of the process including potential pathways, tunneling, etc. Now, we find ourselves caught between a dramatic design change requested by the Corps of Engineers and the design that was approved by more than ten federal, state, and local agencies through the FERC multi-agency permitting process.

As a coda to this section, I would simply point out that permitting and other delays complicate the supply picture. LNG is a global commodity. If we can't move expeditiously to develop and secure supplies of it, other countries will.

Integrated Markets

My fourth point is that we need to better integrate natural gas markets. I have attached a chart to my testimony outlining how this can be thought about. For reasons both physical and financial, we are experiencing something of a balkanized marketplace for natural gas in the United States. Much of the natural gas from the Gulf of Mexico flows into the Northeast, which appears to be the gas market most stressed in the event of a cold winter. More abundant supplies of natural gas from the Western United States and Canada flow into the Chicago and other Midwest Hubs, but because of physical constraints and financial realities, does not flow further eastward into New England.

This places us in a situation where New England is dependent on natural gas primarily from the Gulf, which, despite being a region rich in the resource, struggles to meet the demand. In this year, the hurricanes have greatly complicated the supply picture and placed New England in a position where supply, especially in February, may be problematic.

We need to do everything we can to see that supplies scheduled for delivery to both the Gulf of Mexico and the Northeast US can in fact be delivered.

Safety

Finally, let me address – and hopefully put to rest – the very important issues of safety and security.

First off, I want to note that LNG is as safe, if not safer, to transport and store than most other fuels. It is not explosive, corrosive, carcinogenic, or toxic. It does not pollute land or water resources. It is not transported or stored under pressure.

Like other fuels, LNG has risks associated with its improper handling; however, LNG has certain characteristics which minimize some of the dangers that may result from mishandling. For example, compared to other fuels, LNG is less likely to ignite in a well ventilated area.

With respect to the transportation, LNG ships, with their double-hull construction, are among the best-built, most sophisticated, most robust in the world. According to shipping expert *Lloyd's Register*, there has never been a recorded incident of collision, grounding, fire, explosion, or hull failure that has caused a breach to a cargo tank of an LNG ship. In fact, over the last 40 years there have been 33,000 LNG carrier voyages, covering more than 60 million miles without major accidents or safety problems either in port or on the high seas.

It is also important to note that in the extremely unlikely event that an LNG vessel were involved in an incident that ruptured a cargo tank, and the LNG vapor released met with an ignition source, the likely consequence would be a localized fire, and not an explosion as is often feared.

With respect to the storage of LNG, there has never been a report of any off-site injury to persons or damage to property resulting from an incident at any of the LNG import terminals currently in operation worldwide, including our terminal in Everett. This is due to excellent equipment and facility design, excellent safety procedures employed in the industry, stringent design and safety codes governing design, construction, and operation of storage facilities, and a well-trained, highly experienced workforce.

Finally, we live in a world of comparative risk. At Everett, we take about 80 shipments of LNG a year. Next door to us is a gasoline terminal that probably takes at least as many. Across the Nation there are thousands of such terminals and storage tank farms next to houses, schools, and businesses. I am not saying that because of this we need to pay less attention to the safety and security of LNG shipments. What I am saying is that we need to make sure that we are addressing real world risks in an appropriate and measured way.

Thank you again, Mr. Chairman and Members of the Committee for inviting me to present our thoughts on possible approaches to help moderate natural gas prices and, more specifically, the role of liquefied natural gas in the larger marketplace. I look forward to answering any questions you might have and working with the Committee on these very important issues.